NATIONAL COMMUNICABLE DISEASE CENTER

Morbidity and Mortality

Vol. 17, No. 31

WEEKLY REPORT

Week Ending August 3, 1968

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

CONTENTS

EPIDEMIOLOGIC NOTES AND REPORTS

HUMAN INFECTION WITH THE AGENT OF CANINE ABORTION – New York

On January 12, 1968, a female laboratory technician in Ithaca, New York, had accidental oral contact with the agent of canine abortion while pipetting these organisms. Approximately 3 weeks later she developed a grippe-like illness, characterized by low grade fever, night sweats, malaise, and fatigue. Multiple, walnut-sized, posterior cervical lymph nodes appeared 5 weeks after her contact with the organisms. The lymph nodes increased in size and became painful, and the patient had difficulty holding her head erect.

A blood culture obtained on March 1 was positive for the agent of canine abortion. The specific agglutination titer against this organism was 1:100 after being negative 4 months before; it subsequently rose to 1:250 on April 10.

Treatment with tetracycline, streptomycin, and sulfonamides was initiated on March 1. Gradual improvement

(Continued on page 286)

TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	31st WEEK ENDED		MEDIAN	CUMULATIVE, FIRST 31 WEEKS		
	August 3, 1968	August 5, 1967	1963 - 1967	1968	1967	MEDIAN 1963 - 1967
Aseptic meningitis	143	72	64	1,401	1,179	999
Brucellosis	9	7	6	125	160	160
Diphtheria	–	1	1	99	61	99
Encephalitis, primary:						
Arthropod-borne & unspecified	28	49	---	552	831	---
Encephalitis, post-infectious	11	23	---	327	557	---
Hepatitis, serum	94	50	603	2,491	1,257	24,146
Hepatitis, infectious	902	655		25,951	22,889	
Malaria	42	36	1	1,266	1,185	59
Measles (rubeola)	234	288	1,145	18,915	56,626	236,488
Meningococcal infections, total	24	24	40	1,841	1,555	1,795
Civilian	24	24	---	1,668	1,447	---
Military	–	–	---	173	108	---
Mumps	946	---	---	121,235	---	---
Poliomyelitis, total	1	1	6	32	20	55
Paralytic	1	1	5	32	17	50
Rubella (German measles)	419	203	---	42,172	38,849	---
Streptococcal sore throat & scarlet fever	4,703	4,202	4,081	279,086	301,086	271,407
Tetanus	3	3	6	85	124	145
Tularemia	2	6	6	123	102	148
Typhoid fever	10	10	12	185	233	235
Typhus, tick-borne (Rky. Mt. spotted fever)	15	15	15	147	168	150
Rabies in animals	56	84	70	2,191	2,740	2,740

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	3	Rabies in man:	–
Botulism:	4	Rubella, Congenital Syndrome:	4
Leptospirosis: Ga. 2, Hawaii-1	19	Trichinosis: Mass.-1, N.J.-1, N.Y.C.-1	43
Plague:	1	Typhus, murine:	14
Psittacosis: Mass.-1, Tex.-1	30		

HUMAN INFECTION WITH THE AGENT OF CANINE ABORTION

(Continued from front page)

the symptoms and diminution in the size of lymphadenopathy were noted after 5 days and temperature elevations subsided after 10 days of therapy. The enlarged lymph nodes disappeared after approximately 1 month of treatment.

A second female worker in the laboratory had an identical episode of accidental contact with these organisms on June 3. Blood cultures and serology at that time were negative. The patient was treated with oral tetracycline for 2 weeks. Although she denied symptoms during the course of treatment, her specific agglutination titer against the agent rose to 1:500 later in June.

(Reported by L. E. Carmichael, D.V.M., Ph.D., Cornell University; Samuel R. Barol, M.D., Ithaca, New York; Robert H. Broad, M.D., Tompkins County Health Department, New York; and Julia L. Freitag, M.D., Director, Bureau of Epidemiology, New York State Department of Health.)

Editorial Note

Since 1962 several reports have appeared of high abortion rates in dogs, mainly beagles, associated with a gram-negative organism not previously described.[1,2] Surviving offspring of these dogs are weak and develop lymphadenopathy while infected male dogs develop epididymitis and testicular atrophy. Cases have been recognized throughout the United States, Europe, and Australia. The disease appears to be highly infectious in dogs, and extensive outbreaks have occurred in large commercial kennels.

Human infection with this organism has not been previously reported. Current studies indicate that the organism resembled *Brucella suis* biotype 3 bacteriologically and rough *Brucella* cultures serologically.[3,4] A separate species classification for this agent, *"Brucella canis"*, has been proposed and is now under consideration.

References:
[1]Carmichael, L. E., and Bruner, D. W.: Cornell Vet, *in press*.
[2]Taul, L. K., et al: Canine abortion due to an unclassified gram-negative bacterium. Vet Med 62:543-4, 1967.
[3]Díaz, R., et al: Antigenic relationship of the gram-negative organism causing canine abortion to smooth and rough brucellae. J Bact 95:618-24, 1968.
[4]Jones, L. M., et al: Taxonomic position in the Genus *Brucella* of the causative agent of canine abortion. J Bact 625-30, 1968.

TICK PARALYSIS – Oregon

The first case of tick paralysis to be identified in Oregon in 1968 occurred on July 18 when a 6-year-old girl complained of a tingling feeling in her toes, fingers, and tongue. On July 19, she complained of difficulty in walking, and on July 20, she was unable to walk and was hospitalized. Physical examination revealed bilateral nystagmus on far lateral gaze and minimal control of voluntary movements of arms, legs, and head with inability to resist pressure. There were no urinary or gastrointestinal abnormalities. Spinal fluid examination and blood counts were normal. The physician, in checking for nuchal rigidity, noticed a tick at the base of her hairline on the back of her neck. He removed the tick following the local application of alcohol. The patient recovered within 2 days although pain persisted in the calves of her legs.

The girl had been to camp in New York on July 1 and returned to Oregon on July 12. Her mother had visited the camp on July 8 and had removed one tick from her daughter at that time.

The tick removed by the physician has been identified by the Oregon State Board of Health Public Health Laboratory and the Rocky Mountain Laboratory, NIAID, NIH, DHEW, as *Dermacentor variabilis*.

(Reported by M. A. Holmes, D.V.M., M.P.H., Public Health Veterinarian, Epidemiology Section, Oregon State Board of Health.)

SIMULTANEOUS LEPTOSPIROSIS AND VIVAX MALARIA – Georgia

On May 15, 1968, a 49-year-old Ceylonese physician was hospitalized with fevers, shaking chills, and severe myalgia, of 12 to 24 hours duration. His previous health had been good. Since his arrival in the United States in early April, he had been studying live *Leptospira* organisms in a laboratory in Georgia. On May 6 he had spilled some live *Leptospira* organisms on his hands but had discounted the incident because he had no skin abrasions. On May 8 he had been hiking in northern Georgia, but he denied any animal contact or tick bites.

Upon admission to the hospital on May 15, he was shaking with severe rigors, perspiring profusely, and complaining of extreme myalgia. His temperature was 104°F. He had no rash, icterus, conjunctival suffusion, or splenomegaly. Admission laboratory studies including a CBC, urinalysis, bilirubin, BUN, electrolytes, a malaria smear, and *Leptospira* agglutination tests were normal. Febrile agglutinins were negative except for a typhoid H titer of 1:80. Six blood specimens were drawn and submitted for bacterial and *Leptospira* cultures.

On the day after admission, blood smears were again obtained, and a few trophozoites of *Plasmodium vivax* were found. Chloroquine therapy was begun. However, 24 hours later, the patient's temperature was still 104°F., and he continued to have rigors and severe myalgia. Repeat malaria smears at this time showed no parasites. Because leptospirosis was suspected, the patient was started on penicillin (20 million units per day). In addition, since the patient's recent hiking trip raised the possibility of a rickettsial disease and because his relative bradycardia suggested the possibility of salmonellosis, he was also treated with chloramphenicol (1 gm every 8 hours). He soon became

afebrile, his myalgia disappeared, and he noted a marked subjective improvement. He made an uneventful recovery, and after 14 days treatment with penicillin, 5 days treatment with chloramphenicol, and therapy with primaquine, he was discharged from the hospital.

The six blood cultures submitted on the day of his hospitalization became positive for *Leptospira* organisms on May 23. Preliminary typing procedures identified the organism as identical with or very similar to *L. javanica*, one of the organisms the patient had been studying in his laboratory. *Leptospira* agglutination tests revealed a 1+ reaction against *L. javanica* 4 days after his onset of illness and a 3+ reaction at 15 days.

The final diagnosis was asymptomatic vivax malaria and acute laboratory-acquired leptospirosis.

(Reported by Epidemiological Services Laboratory Section, Epidemiology Program, NCDC; John E. McCroan, Ph.D., State Epidemiologist, Georgia Department of Public Health; and Jonas A. Shulman, M.D., Assistant Professor of Preventive Medicine, Emory University School of Medicine, Atlanta, Georgia.)

CURRENT TRENDS
MEASLES – United States

During the 4-week period, June 16 through July 13, 1968, (weeks 25 – 28), measles was reported from 257 counties or health districts. This is a decrease of 59 counties from the 316 counties or health districts reporting measles in the preceding 4-week period (weeks 21-24), and is 173 fewer than the 430 counties or health districts reporting measles during the corresponding 4-week period in 1967. Of these 257 counties, 32 (12 percent) reported a total of 10 or more cases (Figure 1) as contrasted with 69 of 430 counties or health districts (16 percent) reporting a similar number of cases during the comparable 4-week period in 1967 (Figure 2).

All geographic divisions, except New England and Middle Atlantic, showed a substantial decrease in the number of counties or health districts reporting measles in the 4-week period, June 16 through July 13, 1968, from those reporting measles in the comparable 4-week period in 1967 (Table 1). The New England and Middle Atlantic divisions were the only divisions showing an increase in the number of counties or health districts reporting a total of 10 or more measles cases in the 4-week period in 1968 over the corresponding 4-week period in 1967.

(Reported by State Services Section and Statistics Section, Epidemiology Program, NCDC.)

Table 1
Number of Counties or Health Districts Reporting Measles During 4-week period, June 16 – July 13, 1968 By Geographic Divisions

Geographic Division	Number of Counties or Health Districts Reporting			
	1 or more cases		Total of 10 or more cases	
	1968 June 16-July 13	1967 June 18-July 15	1968 June 16-July 13	1967 June 18-July 15
United States	257	430	32	69
New England	18	19	4	2
Middle Atlantic	48	34	11	6
East North Central	38	64	3	6
West North Central	16	24	–	3
South Atlantic	28	65	6	7
East South Central	12	45	2	6
West South Central	46	69	4	17
Mountain	20	45	1	12
Pacific	31	65	1	10
Puerto Rico	5	5	1	5
Virgin Islands	–	–	–	–

Figure 1
COUNTIES OR HEALTH DISTRICTS REPORTING A TOTAL OF 10 OR MORE CASES OF MEASLES JUNE 16 – JULY 13, 1968

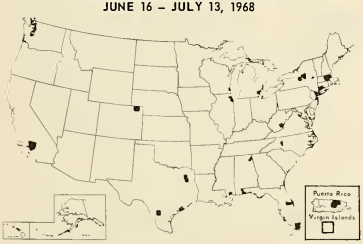
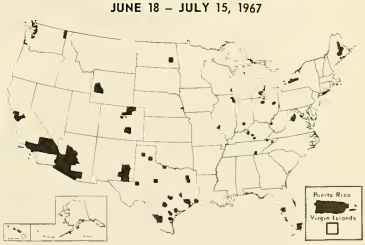


Figure 2
COUNTIES OR HEALTH DISTRICTS REPORTING A TOTAL OF 10 OR MORE CASES OF MEASLES JUNE 18 – JULY 15, 1967



EXCESS MORTALITY – United States

Excess deaths were observed in the United States in the 28th, 29th, and 30th weeks of 1968. Excess mortality was demonstrated in both total mortality and in the age group 65 and over. During these weeks unusually hot weather has prevailed in the New England, Middle Atlantic, and Pacific divisions of the country.[1] Similar episodes of excess mortality occurred in the Middle Atlantic division during the summer of 1963 (MMWR, Vol. 12, No. 28), and in the Middle Atlantic and West North Central divisions during the summer of 1966 (MMWR, Vol. 15, No. 29).

This summer the excess mortality noted for the country as a whole reflects 3 consecutive weeks of excess in both the Middle Atlantic and Pacific divisions; however, neither division has had excess pneumonia-influenza mortality. New England, which has had 5 consecutive weeks of slight excess pneumonia-influenza mortality, had excess deaths from all causes only in the 28th week.

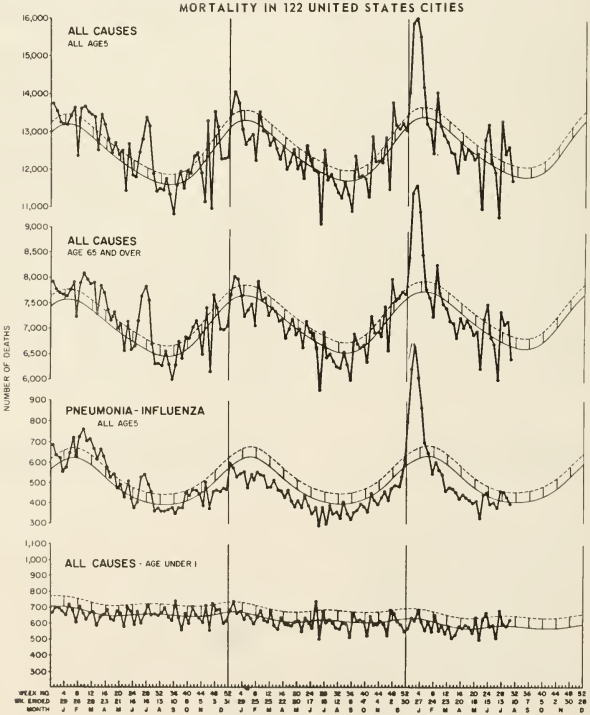
The mortality in 122 United States Cities is presented in Figure 3. In the summer of 1966, excess mortality was demonstrated in deaths from all causes and from pneumonia and influenza. Mortality in children under 1 was unaffected. This summer, excess mortality has been reflected in deaths from all causes but has been less apparent for pneumonia-influenza.

(Reported by Statistics Section, and Respiratory Diseases Unit, Viral Diseases Section, Epidemiology Program, NCDC.)

Reference:

[1]U.S. Dept. of Commerce, Environmental Science Services Administration, Environmental Data Service, and U.S. Dept. of Agriculture, Statistical Reporting Service: Weekly Weather and Crop Bulletin, 55(24-31), 1968. Edited by J. L. Baldwin.

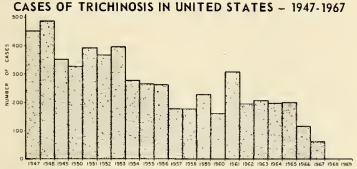
Figure 3
MORTALITY IN 122 UNITED STATES CITIES



SURVEILLANCE SUMMARY
TRICHINOSIS – United States 1967*

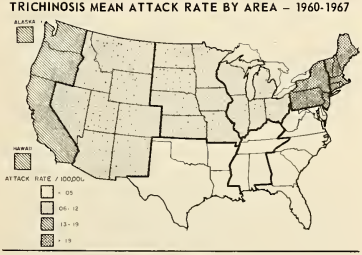
In 1967 fewer cases of trichinosis were reported than in any previous year (Figure 4). This decline has been especially evident in the past 2 years; the 67 cases in 1967 represent approximately half of the 115 cases reported in 1966 and a third of the 199 cases reported in 1965. This decline has occurred despite an intensification of surveillance of trichinosis throughout the country. During the past 21 years, the reported incidence of trichinosis has varied from 200 to 500 cases per year. In 1967, for the first time, no deaths attributable to trichinosis were reported. No large outbreaks occurred in 1967, and the largest clusters reported were two separate episodes involving two families, each with three cases.

Figure 4
CASES OF TRICHINOSIS IN UNITED STATES – 1947-1967



The 67 cases were reported from 24 states. New York reported the highest incidence with 15, 12 of which were reported from New York City. Washington state reported the second highest number with six cases, followed by Massachusetts and Kansas with five each, California and New Jersey with four each, and Maryland with three, Two or fewer cases were reported from the other 17 states. An analysis of the geographic distribution of trichinosis for the past 8 years (1960-1967) revealed that the New England and Middle Atlantic states reported the highest mean attack rates while the South Atlantic, East South Central, and West South Central states reported the lowest mean attack rates (Figure 5). The extent to which these rates represent true differences in incidence or variations in recognition and reporting is unknown.

Figure 5
TRICHINOSIS MEAN ATTACK RATE BY AREA – 1960-1967



*Preliminary data

An analysis of the 67 cases by age and sex showed that the mean age of the male patients was 38.0 years and the mean age of the female patients was 36.7 years. There were 33 cases in males and 34 cases in females (Table 2).

Table 2
Cases of Trichinosis by Age and Sex – 1967

Age	Males	Females	Total	Percent
0-9	–	1	1	1.5
10-19	4	4	8	11.9
20-29	9	3	12	17.9
30-39	1	13	14	20.9
40-49	10	4	14	20.9
50-59	5	5	10	14.9
60-69	3	1	4	6.0
70 or >	–	1	1	1.5
Unknown	1	2	3	4.5
Total	33	34	67	100.0

In 53 of the 67 cases, pork products were incriminated as the source of infection (Table 3). Sausage was implicated in 18 cases and "hamburger" in 5 cases. The place where the suspect meat had been consumed was reported for 53 cases. There were 35 cases acquired in homes, 16 acquired in restaurants, and 2 acquired at markets where the meat was sold (Table 4). The source of meat was determined in 44 cases. All of these 44 cases had purchased the implicated meat from commercial sources, and none were due to farm grown, home processed pork. Of the 67 persons with trichinosis, 29 reported that the meat had been cooked or partially cooked. 21 consumed raw meat, and the preparation of meat was unknown in 17 cases.

Table 3
Source of Infection for Cases of Trichinosis – 1967

Food	Cases
Pork Products	
Fresh sausage	12
Salami (sausage)	3
Chops	3
Cured "Italian" sausage	2
Chopped pork	2
Frankfurters	2
Cured "Polish" sausage	1
Bacon	1
Pork steak	1
Pork roast	1
Unspecified	25
Subtotal	53
Non-Pork Products	
Hamburger	5
Unknown	9
Total	67

The diagnosis of trichinosis was based on a combination of historical information, clinical manifestations, muscle biopsies, and skin and serologic tests. The mean incubation period in the 67 cases was 9 days, and the mean period between date of onset and time of diagnosis was 23 days. Elevated eosinophil counts (greater than 5

(Continued on page 296)

RECOMMENDATION OF THE PUBLIC HEALTH SERVICE ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

In June 1968 the Public Health Service Advisory Committee on Immunization Practices completed the following recommendations on the use of Immune Serum Globulin for Prevention of Viral Hepatitis.

IMMUNE SERUM GLOBULIN FOR PREVENTION OF VIRAL HEPATITIS
(Infectious Hepatitis and Transfusion-Associated Hepatitis)

INFECTIOUS HEPATITIS

The agent that causes human infectious hepatitis has not yet been identified but is presumed to be a virus. No vaccine is available. Administration of immune serum globulin (ISG)* to exposed persons can, however, afford a high degree of protection against infectious hepatitis. ISG substantially reduces the frequency of overt clinical disease, although inapparent infection may occur. Following such infection, life-long active immunity is thought to develop.

Patients with infectious hepatitis have been shown to excrete virus in stool as much as 2 to 3 weeks before and 2 weeks after onset of jaundice. Viremia has been demonstrated approximately 2 weeks before and less than 1 week after onset of jaundice.

Transmission of the disease is principally by the fecal-oral route and is most likely to occur under conditions of inadequate sanitation or close contact with infected individuals. Direct person-to-person spread of infection otherwise is unusual. Transmission is also possible by the parenteral route. The incubation period of infectious hepatitis is relatively long, in most cases between 15 and 50 days (average 25 to 30 days).

IMMUNE SERUM GLOBULIN

Immune serum globulin is prepared for intramuscular injection from large pools of plasma (1,000 or more donors) obtained from venous and, or placental blood. The product is a 16.5 percent solution of globulin prepared by cold alcohol fractionation. Serum hepatitis has not been transmitted by ISG of this type.

USE OF IMMUNE SERUM GLOBULIN FOR PREVENTING INFECTIOUS HEPATITIS

The decision to administer ISG should be based on assessment of the epidemiologic circumstances – specifically, whether the exposure could result in infection. The administration of ISG is relevant when there is: 1) definite exposure to a known case or source of infection, or 2) anticipated continuous or intermittent exposure.

ISG given after known exposure should be given as soon as possible. Its prophylactic value decreases as time increases after exposure. The use of ISG more than 5-6 weeks after exposure is not indicated.

Dosage

The dosage patterns of ISG in common use have been derived primarily from field and clinical observations. Data from these observations provide operational guidelines on which to base recommendations.

Under most conditions of exposure, protection has been afforded by giving 0.01 ml. of ISG per pound of body weight (0.01 ml./lb. or approximately 0.02 ml./kg.). This dosage may be conveniently simplified (Table 1):

Table 1

Person's Weight (lbs.)	ISG Dose (ml.)*
up to 50	0.5
50-100	1.0
over 100	2.0

*Within limits, larger doses of ISG provide **longer-lasting** but not necessarily **more** protection. Higher doses are, therefore, used under certain circumstances, (see sections "Institutional Contacts" and "Travelers to Foreign Countries").

Household Contacts: There is good evidence that close personal contact, such as occurs among permanent or even temporary household residents, is important in spreading infectious hepatitis. Secondary attack rates are high for household contacts, particularly children and teenagers. Although secondary attack rates are somewhat lower for adults, their illnesses tend to be more severe. For these reasons, ISG is recommended for all household contacts who have not already had infectious hepatitis.

School Contacts: Although the highest incidence of hepatitis is among school-age children, contact at school is usually not an important means of transmitting this disease. Therefore, routine administration of ISG is not indicated for pupil or teacher contacts of a case. However, when epidemiologic study has clearly shown that school or classroom contact is responsible for continued transmission of disease, it is reasonable to administer ISG to individuals at risk.

Institutional Contacts: In contrast to schools, conditions favoring transmission of infectious hepatitis exist in institutions such as prisons and facilities for the mentally retarded. Sporadic cases as well as epidemics have frequently been reported in such institutions. ISG administered to patient and staff contacts of cases in the doses shown in Table 1 effectively limited the spread of disease in these circumstances.

Where infectious hepatitis exists endemically, particularly in very large institutions with high rates of admission and discharge, residents and staff personnel may be subject to frequent and continuing exposure. Under these conditions, use of ISG has not resulted in eradication of hepatitis. However, it has been shown to provide temporary protection when administered in doses of 0.02 to 0.05 ml./lb.

*The official name of the product in use is: Immune Serum Globulin (Human). Poliomyelitis Immune Globulin (Human) is an equivalent product and may also be used; other immune globulin products are not suitable.

at the time of admission or employment. It may be necessary to readminister ISG in the same dose after 6 months if the risk is felt to persist.

Hospitol Contocts: Routine prophylactic administration of ISG to hospital personnel is not indicated. Emphasis should be placed on sound hygienic practices. Intensive, continued education programs pointing out the risks of exposure to infectious hepatitis and the recommended precautions should be directed toward hospital personnel who have close contact with patients or infectious materials.

For those accidentally inoculated with blood or serum of patients with hepatitis, the appropriate prophylactic dose of ISG is that recommended in Table 1. There is no reason to give a larger dose because ISG appears to be effective in preventing only infectious hepatitis, not transfusion-associated (serum) hepatitis (see section "Transfusion-Associated Hepatitis").

Office and Foctory Contocts: Routine administration of ISG is not indicated for persons in the usual office or factory situation exposed to a fellow worker with hepatitis.

Common Source Exposures: When a vehicle, such as food or water, is identified as a common source of infection of multiple hepatitis cases, administration of ISG should be considered for all those exposed to the source.

Pregnoncy: Current information does not indicate that pregnancy in itself should alter the recommendations for ISG prophylaxis.

Trovelers to Foreign Countries: The risk of infectious hepatitis for U.S. residents traveling abroad varies with living conditions and the prevalence of hepatitis in the areas to be visited. Travelers may be at no greater risk than in the United States when their travel involves ordinary tourist activities and little exposure to uncooked foods or water of uncertain quality. For these travelers, ISG is not recommended.

For travelers visiting areas where hepatitis is a major health problem who may be exposed to infected persons and to contaminated food and water, there is increased risk of acquiring hepatitis. A single dose of ISG is recommended for them as shown in Table 2 which gives guidelines for U.S. residents traveling in foreign countries. (Large geographic areas have been defined for ease in interpretation and because information is inadequate to permit developing more precise boundaries.)

For individuals who reside abroad in areas where hepatitis is common, the risk of hepatitis is greatly increased and appears to continue so for years. Experience has shown that regular administration of ISG offers at least partial protection against hepatitis. It is recommended that prophylactic ISG be repeated every six months at doses indicated in Table 2.*

Reactions

Intramuscular administration of ISG rarely is followed by adverse reactions. Discomfort may occur at the site of injection, especially when larger volumes are used. A few instances of hypersensitivity have been reported, but in view of the very large number of persons who have received ISG, the risk is exceedingly small.

*Some agencies have used up to 0.05 ml./lb. each 5-6 months rather than the 5 ml. for adults recommended here.

Table 2
Guidelines for ISG Prophyloxis of Infectious Hepotitis for U.S. Residents Traveling or Living in Foreign Countries* (see text for odditionol detoils)

Area	Person's Weight (lbs.)	Short-Term Travel (1-2 months) ISG Dose (ml.)	Extended Travel or Residence (3-6 months)** ISG Dose (ml.)
Africa			
Asia			
North America			
Central America	up to 50	0.5	1.0
Mexico (Rural)	50-100	1.0	2.5
Pacific Region			
Philippine Islands	over 100	2.0	5.0
South Pacific Islands			
South America			
Europe			
North America			
Canada			
Caribbean Islands			
Mexico (Urban)	Routine ISG prophylaxis is not indicated		
Pacific Region			
Australia			
Japan			
New Zealand			

*In all travel, care should be exercised in consuming uncooked foods and water of uncertain quality.
**Repeat every 6 months of travel or residence.

Antibody against gamma globulin may appear following administration of ISG although its clinical significance is unknown. When ISG is indicated for prophylaxis of infectious hepatitis, this theoretical consideration should not preclude its administration.

TRANSFUSION-ASSOCIATED HEPATITIS

The risk of transmitting viral hepatitis by blood transfusion is a serious and continuing problem. Several reports indicate that the incidence of clinical hepatitis is greater among recipients of blood obtained from certain categories of donors. The risk also becomes greater as the number of transfusions increases. Furthermore, the case-fatality rate of transfusion-associated hepatitis increases with advancing age.

Evidence has been advanced both for and against the effectiveness of ISG as prophylaxis of transfusion-associated hepatitis. Although some investigators have reported that 10 ml. of ISG at the time of the transfusion and again 1 month later reduced the number of cases, other equally careful studies have not substantiated this claim. Existing evidence provides no adequate basis for recommending that ISG be given routinely to recipients of blood transfusions.

Among the means of effectively lowering the incidence of transfusion-associated hepatitis are: careful selection of donors, development of central registries of known or suspect carriers, and use of blood and potentially iterogenic blood products only when necessary.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED
AUGUST 3, 1968 AND AUGUST 5, 1967 (31st WEEK)

AREA	ASEPTIC MENINGITIS		BRUCELLOSIS	DIPHTHERIA	ENCEPHALITIS			HEPATITIS			MALARIA
					Primary including unsp. cases		Post-Infectious	Serum	Infectious		
	1968	1967	1968	1968	1968	1967	1968	1968	1968	1967	1968
UNITED STATES...	143	72	9	-	28	49	11	94	902	655	42
NEW ENGLAND.....	9	1	-	-	-	1	-	1	65	29	3
Maine..*	-	-	-	-	-	-	-	-	1	1	-
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	-	-	-	-	-	-	-	-	8	-	-
Massachusetts.....	6	1	-	-	-	-	-	-	25	17	3
Rhode Island.....	2	-	-	-	-	1	-	-	12	3	-
Connecticut.....	1	-	-	-	-	-	-	1	19	8	-
MIDDLE ATLANTIC.....	8	12	1	-	3	7	-	27	111	109	8
New York City.....	1	3	-	-	2	3	-	19	47	21	-
New York, up-State.	-	1	-	-	-	1	-	3	25	19	-
New Jersey..*	7	5	1	-	-	-	-	3	14	41	2
Pennsylvania.....	-	3	-	-	1	3	-	2	25	28	6
EAST NORTH CENTRAL...	12	6	-	-	8	20	2	3	161	107	2
Ohio.....	9	1	-	-	7	13	-	-	35	20	1
Indiana.....	1	-	-	-	-	-	1	-	16	6	1
Illinois.....	-	4	-	-	-	4	-	-	43	43	-
Michigan.....	2	1	-	-	-	3	1	3	55	33	-
Wisconsin.....	-	-	-	-	1	-	-	-	12	5	-
WEST NORTH CENTRAL...	10	2	1	-	2	4	2	-	39	31	3
Minnesota.....	6	1	-	-	1	1	1	-	12	3	-
Iowa.....	-	1	1	-	-	2	1	-	4	7	-
Missouri.....	2	-	-	-	1	1	-	-	10	11	-
North Dakota.....	-	-	-	-	-	-	-	-	2	-	-
South Dakota..*	-	-	-	-	-	-	-	-	3	-	-
Nebraska.....	2	-	-	-	-	-	-	-	-	1	-
Kansas.....	-	-	-	-	-	-	-	-	8	9	3
SOUTH ATLANTIC.....	20	14	5	-	1	7	1	7	106	72	12
Delaware.....	-	-	-	-	-	-	-	-	5	3	-
Maryland.....	4	4	-	-	-	3	-	-	14	14	-
Dist. of Columbia..	4	-	-	-	-	-	-	-	1	2	-
Virginia.....	1	2	-	-	-	2	-	-	6	9	-
West Virginia.....	1	3	-	-	-	-	-	-	2	4	-
North Carolina.....	3	-	-	-	-	-	-	-	8	5	10
South Carolina.....	-	5	-	-	-	-	-	-	1	2	2
Georgia.....	-	-	5	-	-	-	-	-	53	14	-
Florida..*	7	-	-	-	1	2	1	7	16	19	-
EAST SOUTH CENTRAL...	6	9	-	-	-	1	-	-	44	33	-
Kentucky.....	-	1	-	-	-	-	-	-	9	13	-
Tennessee.....	1	4	-	-	-	1	-	-	20	9	-
Alabama..*	3	2	-	-	-	-	-	-	6	5	-
Mississippi.....	2	2	-	-	-	-	-	-	9	6	-
WEST SOUTH CENTRAL...	28	9	2	-	3	5	-	4	59	66	-
Arkansas.....	-	1	-	-	-	-	-	-	-	3	-
Louisiana.....	6	1	2	-	3	1	-	3	18	13	-
Oklahoma.....	1	5	-	-	-	4	-	-	2	6	-
Texas..*	21	2	-	-	-	-	-	1	39	44	-
MOUNTAIN.....	-	-	-	-	3	1	-	1	29	20	9
Montana.....	-	-	-	-	-	-	-	-	8	2	-
Idaho.....	-	-	-	-	1	-	-	-	-	-	-
Wyoming.....	-	-	-	-	-	-	-	-	1	2	-
Colorado.....	-	-	-	-	2	1	-	1	3	-	9
New Mexico.....	-	-	-	-	-	-	-	-	6	4	-
Arizona.....	-	-	-	-	-	-	-	-	5	9	-
Utah.....	-	-	-	-	-	-	-	-	6	3	-
Nevada.....	-	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	50	19	-	-	8	3	6	51	288	188	5
Washington.....	4	1	-	-	-	-	-	-	19	18	2
Oregon.....	-	2	-	-	3	-	-	1	21	16	-
California.....	43	14	-	-	5	3	6	50	223	154	3
Alaska.....	-	-	-	-	-	-	-	-	2	-	-
Hawaii.....	3	2	-	-	-	-	-	-	23	-	-
Puerto Rico..*	-	1	-	-	-	-	-	-	32	19	-

* Delayed reports: Diphtheria: Tex. 4
Encephalitis, post-infectious: Fla. 2
Hepatitis, serum: N.J. delete 4
Hepatitis, infectious: Me. 4, N.J. delete 26, S.D. 4, Ala. 1, P.R. 26
Malaria: Me. 1

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

AUGUST 3, 1968 AND AUGUST 5, 1967 (31st WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1968	1968	1967	1968	1968	1967	1968	1968	1968	Cum. 1968	1968
UNITED STATES...	234	18,915	56,626	24	1,841	1,555	946	1	1	32	419
NEW ENGLAND.....	12	1,134	810	1	92	65	138	-	-	1	79
Maine.*.....	-	35	234	-	6	3	5	-	-	-	3
New Hampshire.....	-	141	74	-	7	2	2	-	-	-	-
Vermont.....	-	2	34	-	1	1	14	-	-	-	8
Massachusetts.*....	4	360	319	-	41	32	86	-	-	1	46
Rhode Island.....	-	5	62	-	7	4	5	-	-	-	10
Connecticut.....	8	591	87	1	30	23	26	-	-	-	12
MIDDLE ATLANTIC.....	70	3,775	2,185	3	329	254	75	-	-	-	59
New York City.....	60	1,850	429	1	68	46	57	-	-	-	31
New York, Up-State.	6	1,184	549	-	55	61	NN	-	-	-	27
New Jersey.....	3	601	479	-	118	89	18	-	-	-	1
Pennsylvania.....	1	140	728	2	88	58	NN	-	-	-	-
EAST NORTH CENTRAL...	42	3,648	5,202	3	221	206	190	-	-	1	97
Ohio.....	-	287	1,127	1	60	70	17	-	-	-	4
Indiana.*.....	13	643	587	-	28	22	17	-	-	-	5
Illinois.....	9	1,342	920	1	51	50	14	-	-	1	7
Michigan.*.....	9	254	897	-	62	49	39	-	-	-	22
Wisconsin.....	11	1,122	1,671	1	20	15	103	-	-	-	59
WEST NORTH CENTRAL...	3	372	2,812	3	97	67	23	-	-	1	6
Minnesota.....	-	13	131	1	22	16	1	-	-	-	-
Iowa..*.....	-	96	743	-	6	13	13	-	-	-	1
Missouri.....	-	81	331	-	31	13	4	-	-	1	2
North Dakota.....	3	128	840	-	3	1	5	-	-	-	3
South Dakota.....	-	4	52	1	5	6	NN	-	-	-	-
Nebraska.....	-	38	622	-	6	12	-	-	-	-	-
Kansas.....	-	10	93	1	24	6	-	-	-	-	-
SOUTH ATLANTIC.....	30	1,452	6,768	3	377	297	91	-	-	1	49
Delaware.....	-	15	43	-	7	6	4	-	-	-	4
Maryland.....	6	94	147	1	28	35	17	-	-	-	1
Dist. of Columbia..	-	6	22	-	14	10	3	-	-	-	-
Virginia.....	-	293	2,159	1	30	36	9	-	-	-	13
West Virginia.....	7	271	1,355*	-	9	21	35	-	-	-	21
North Carolina.....	1	282	841	1	74	65	NN	-	-	1	-
South Carolina.....	-	13	507	-	56	28	1	-	-	-	1
Georgia.....	-	4	32	-	73	44	-	-	-	-	-
Florida.....	16	474	1,662	-	86	52	22	-	-	-	9
EAST SOUTH CENTRAL...	14	559	5,090	1	159	123	76	-	-	1	23
Kentucky.....	4	179	1,315	-	64	34	38	-	-	1	-
Tennessee.....	1	57	1,802	-	51	51	34	-	-	-	20
Alabama.....	7	92	1,316	1	24	25	4	-	-	-	3
Mississippi.....	2	231	657	-	20	13	-	-	-	-	-
WEST SOUTH CENTRAL...	28	4,606	17,050	4	297	212	101	-	-	17	46
Arkansas.....	-	3	1,404	-	20	28	-	-	-	-	-
Louisiana.....	-	2	151	3	84	83	-	-	-	-	-
Oklahoma.....	-	111	3,325	-	49	16	-	-	-	1	3
Texas.....	28	4,490	12,170	1	144	85	101	-	-	16	43
MOUNTAIN.....	7	963	4,556	2	29	27	88	-	-	-	19
Montana.....	1	67	277	-	3	-	10	-	-	-	1
Idaho.....	-	20	375	-	11	1	1	-	-	-	-
Wyoming.....	-	51	179	-	-	1	-	-	-	-	-
Colorado.....	6	492	1,527	2	10	12	38	-	-	-	9
New Mexico.....	-	88	575	-	-	3	3	-	-	-	1
Arizona.....	-	219	997	-	1	4	12	-	-	-	7
Utah.....	-	21	357	-	1	4	24	-	-	-	1
Nevada.....	-	5	269	-	3	2	-	-	-	-	-
PACIFIC.....	28	2,406	12,153	4	240	304	164	1	1	10	41
Washington.....	1	515	5,407	-	37	25	8	-	-	1	1
Oregon.....	12	483	1,548	-	18	24	7	-	-	-	4
California.....	15	1,371	4,904	4	172	242	108	1	1	9	28
Alaska.....	-	2	132	-	2	9	4	-	-	-	4
Hawaii.....	-	35	162	-	11	4	37	-	-	-	4
Puerto Rico.*.....	18	374	2,084	-	19	12	20	-	-	-	-

* Delayed reports: Measles: Mass. delete 5, Ind. delete 2, Mich. 3, Iowa 1, P.R. 2
Mumps: Me. 9, P.R. 10
Rubella: Ind. delete 5

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
AUGUST 3, 1968 AND AUGUST 5, 1967 (31st WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968
UNITED STATES...	4,703	3	85	2	123	10	185	15	147	56	2,191
NEW ENGLAND.....	439	-	2	-	46	-	5	-	-	1	66
Maine..*	9	-	-	-	-	-	-	-	-	1	51
New Hampshire.....	15	-	-	-	-	-	1	-	-	-	2
Vermont.....	-	-	-	-	46	-	-	-	-	-	10
Massachusetts.....	41	-	1	-	-	-	2	-	-	-	2
Rhode Island.....	31	-	-	-	-	-	-	-	-	-	-
Connecticut.....	343	-	1	-	-	-	2	-	-	-	1
MIDDLE ATLANTIC.....	180	-	12	-	7	5	19	6	13	1	26
New York City.....	10	-	6	-	-	-	8	-	-	-	-
New York, Up-State.	166	-	4	-	7	-	3	-	1	1	19
New Jersey.....	NN	-	-	-	-	5	5	5	6	-	-
Pennsylvania.....	4	-	2	-	-	-	3	1	6	-	7
EAST NORTH CENTRAL...	382	-	8	-	8	1	26	1	6	4	200
Ohio.....	52	-	-	-	1	-	12	1	4	-	77
Indiana..*	86	-	1	-	1	-	3	-	-	2	68
Illinois.....	94	-	5	-	5	1	10	-	2	1	24
Michigan.....	77	-	2	-	1	-	-	-	-	1	10
Wisconsin.....	73	-	-	-	-	-	1	-	-	-	21
WEST NORTH CENTRAL...	111	-	4	-	9	-	8	-	4	16	544
Minnesota.....	15	-	1	-	-	-	-	-	-	7	159
Iowa..*	13	-	1	-	-	-	1	-	1	4	91
Missouri.....	6	-	2	-	7	-	3	-	1	3	80
North Dakota.....	31	-	-	-	-	-	-	-	-	-	82
South Dakota.....	5	-	-	-	1	-	1	-	1	-	79
Nebraska.....	2	-	-	-	-	-	3	-	1	-	24
Kansas.....	39	-	-	-	1	-	-	-	-	2	29
SOUTH ATLANTIC.....	599	1	17	1	8	2	43	5	77	7	234
Delaware.....	4	-	-	-	-	-	-	-	-	-	-
Maryland.....	99	-	1	-	-	-	9	-	7	1	5
Dist. of Columbia..	7	-	2	-	-	-	2	-	-	-	-
Virginia.....	223	1	4	-	1	-	8	2	28	2	91
West Virginia.....	129	-	1	-	-	-	-	-	-	1	31
North Carolina.....	-	-	2	-	2	-	2	2	25	-	9
South Carolina.....	9	-	1	-	-	-	-	1	4	-	-
Georgia.....	15	-	-	1	3	1	11	-	11	2	36
Florida.....	113	-	6	-	2	-	11	-	2	1	62
EAST SOUTH CENTRAL...	883	1	10	-	6	-	23	1	27	7	492
Kentucky.....	37	-	1	-	1	-	5	-	6	7	243
Tennessee.....	725	1	3	-	4	-	13	1	17	-	227
Alabama.....	56	-	3	-	-	-	-	-	3	-	21
Mississippi..*	65	-	3	-	1	-	5	-	1	-	1
WEST SOUTH CENTRAL...	535	-	17	1	32	1	21	-	14	4	382
Arkansas..*	2	-	4	-	6	-	4	-	1	-	44
Louisiana.....	27	-	6	-	6	-	3	-	-	-	34
Oklahoma..*	18	-	-	1	8	1	6	-	7	2	113
Texas.....	488	-	7	-	12	-	8	-	6	2	191
MOUNTAIN.....	889	-	-	-	6	-	11	2	5	4	58
Montana.....	18	-	-	-	-	-	-	-	-	-	-
Idaho.....	83	-	-	-	-	-	-	-	1	-	-
Wyoming.....	22	-	-	-	1	-	1	-	-	-	3
Colorado.....	557	-	-	-	3	-	2	2	4	-	3
New Mexico.....	74	-	-	-	-	-	6	-	-	2	23
Arizona.....	41	-	-	-	-	-	2	-	-	2	29
Utah.....	88	-	-	-	2	-	-	-	-	-	-
Nevada.....	6	-	-	-	-	-	-	-	-	-	-
PACIFIC.....	685	1	15	-	1	1	29	-	1	12	189
Washington.....	90	-	1	-	-	1	2	-	-	-	-
Oregon.....	59	-	1	-	1	-	4	-	-	1	4
California.....	422	1	13	-	-	-	23	-	1	11	185
Alaska.....	15	-	-	-	-	-	-	-	-	-	-
Hawaii.....	99	-	-	-	-	-	-	-	-	-	-
Puerto Rico..*	3	-	6	-	-	-	1	-	-	1	17

* Delayed reports: SST: Me. 5, Ind. delete 55, Miss. 85, Ark. 6, P.R. 5
Tetanus: Iowa 1
Typhoid: Okla. 1

Week No. 31

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED AUGUST 3, 1968

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
NEW ENGLAND:	716	418	39	34
Boston, Mass.	201	106	14	13
Bridgeport, Conn.	46	28	4	3
Cambridge, Mass.	24	15	-	1
Fall River, Mass.	26	17	2	4
Hartford, Conn.	56	32	-	2
Lowell, Mass.	23	14	-	1
Lynn, Mass.	21	15	1	-
New Bedford, Mass.	24	18	-	1
New Haven, Conn.	107	62	2	-
Providence, R. I.	51	27	4	5
Somerville, Mass.	14	11	2	-
Springfield, Mass.	45	31	5	-
Waterbury, Conn.	26	15	-	1
Worcester, Mass.	52	27	5	3
MIDDLE ATLANTIC:	3,120	1,750	131	151
Albany, N. Y.	41	26	2	2
Allentown, Pa.	36	22	5	1
Buffalo, N. Y.	130	68	6	7
Camden, N. J.	44	18	1	4
Elizabeth, N. J.	31	19	1	2
Erie, Pa.	41	26	1	-
Jersey City, N. J.	82	42	9	6
Newark, N. J.	86	40	5	1
New York City, N. Y.	1,537	859	51	79
Paterson, N. J.	44	25	-	1
Philadelphia, Pa.	496	267	13	29
Pittsburgh, Pa.	161	83	5	2
Reading, Pa.	50	30	3	1
Rochester, N. Y.	106	72	18	5
Schenectady, N. Y.	18	13	2	-
Scranton, Pa.	49	37	2	1
Syracuse, N. Y.	68	42	-	4
Trenton, N. J.	46	25	2	4
Utica, N. Y.	23	18	3	-
Yonkers, N. Y.	31	18	2	2
EAST NORTH CENTRAL:	2,369	1,288	71	137
Akron, Ohio	59	36	-	2
Canton, Ohio	35	22	1	2
Chicago, Ill.	616	309	18	37
Cincinnati, Ohio	200	116	5	9
Cleveland, Ohio	175	87	2	9
Columbus, Ohio	127	65	2	13
Dayton, Ohio	59	28	4	5
Detroit, Mich.	324	174	12	23
Evansville, Ind.	41	33	3	-
Flint, Mich.	47	22	2	1
Fort Wayne, Ind.	38	19	1	3
Gary, Ind.	33	21	3	2
Grand Rapids, Mich.	35	18	3	1
Indianapolis, Ind.	144	84	2	8
Madison, Wis.	30	16	2	3
Milwaukee, Wis.	125	69	1	2
Peoria, Ill.	42	25	-	2
Rockford, Ill.	33	16	3	4
South Bend, Ind.	50	28	2	4
Toledo, Ohio	94	64	5	5
Youngstown, Ohio	62	36	-	2
WEST NORTH CENTRAL:	766	464	16	37
Des Moines, Iowa	57	34	-	3
Duluth, Minn.	29	20	-	-
Kansas City, Kans.	33	18	3	5
Kansas City, Mo.	127	77	1	5
Lincoln, Nebr.	30	22	2	-
Minneapolis, Minn.	90	60	-	5
Omaha, Nebr.	56	37	-	1
St. Louis, Mo.	236	134	3	12
St. Paul, Minn.	59	36	2	3
Wichita, Kans.	49	26	5	3

Area	All Causes		Pneumonia and Influenza	Under 1 year
	All Ages	65 years and over	All Ages	All Causes
SOUTH ATLANTIC:	1,087	552	40	70
Atlanta, Ga.	103	42	1	6
Baltimore, Md.	263	131	5	11
Charlotte, N. C.	42	22	2	5
Jacksonville, Fla.	53	26	2	2
Miami, Fla.	98	52	-	6
Norfolk, Va.	46	23	4	5
Richmond, Va.	52	28	-	1
Savannah, Ga.	31	14	3	1
St. Petersburg, Fla.	90	64	6	4
Tampa, Fla.	69	39	6	3
Washington, D. C.	198	90	7	25
Wilmington, Del.	42	21	4	1
EAST SOUTH CENTRAL:	630	308	20	34
Birmingham, Ala.	114	50	2	9
Chattanooga, Tenn.	39	22	1	-
Knoxville, Tenn.	41	24	1	2
Louisville, Ky.	127	71	8	6
Memphis, Tenn.	149	61	3	13
Mobile, Ala.	42	20	1	1
Montgomery, Ala.	28	15	3	1
Nashville, Tenn.	90	45	1	2
WEST SOUTH CENTRAL:	1,117	575	39	61
Austin, Tex.	34	15	7	-
Baton Rouge, La.	41	27	2	2
Corpus Christi, Tex.	19	12	-	1
Dallas, Tex.	139	74	2	15
El Paso, Tex.	29	14	2	3
Fort Worth, Tex.	73	41	1	3
Houston, Tex.	210	112	2	8
Little Rock, Ark.	61	24	4	4
New Orleans, La.	185	84	8	13
Oklahoma City, Okla.	97	57	2	4
San Antonio, Tex.	111	61	4	5
Shreveport, La.	40	21	1	3
Tulsa, Okla.	58	33	4	-
MOUNTAIN:	434	244	12	38
Albuquerque, N. Mex.	45	21	1	5
Colorado Springs, Colo.	25	19	3	1
Denver, Colo.	102	53	4	6
Ogden, Utah	24	20	2	2
Phoenix, Ariz.	97	50	-	10
Pueblo, Colo.	27	19	-	-
Salt Lake City, Utah	65	35	-	9
Tucson, Ariz.	49	27	2	5
PACIFIC:	1,476	843	21	74
Berkeley, Calif.	20	12	1	-
Fresno, Calif.	63	27	-	6
Glendale, Calif.	33	18	-	1
Honolulu, Hawaii	43	21	-	1
Long Beach, Calif.	87	46	2	2
Los Angeles, Calif.	448	280	7	16
Oakland, Calif.	69	40	1	6
Pasadena, Calif.	43	24	-	2
Portland, Oreg.	97	59	1	1
Sacramento, Calif.	44	17	1	3
San Diego, Calif.	95	51	3	9
San Francisco, Calif.	166	84	2	15
San Jose, Calif.	56	31	-	4
Seattle, Wash.	118	69	2	6
Spokane, Wash.	60	44	-	1
Tacoma, Wash.	34	20	1	1
Total	11,715	6,442	389	636

Cumulative Totals
including reported corrections for previous weeks

All Causes, All Ages	401,035
All Causes, Age 65 and over	232,378
Pneumonia and Influenza, All Ages	16,895
All Causes, Under 1 Year of Age	18,625

TRICHINOSIS – *(Continued from page 289)*

Table 4
Cases of Trichinosis by Place Consumed and Source of Meat – 1967

Place Consumed	Source			
	Commercial	Farm	Unknown	Total
Home	29	0	6	35
Restaurant	12	0	4	16
Market	2	0	0	2
Unknown	1	0	13	14
Total	44	0	23	67

percent) were reported in 50 cases. Periorbital edema was reported in 45 cases. In 35 cases, the patients had both elevated eosinophil counts and periorbital edema. Hospital discharge summaries were obtained for 18 confirmed cases, and the signs and symptoms found in these 18 cases are presented in Table 5.

Table 5
Clinical Findings in 18 Confirmed Cases of Trichinosis 1967

Clinical Findings	Cases
Eosinophilia	16
Periorbital edema	15
Myalgia	15
Fever	14
Diarrhea	8
Headaches	7
Chills	6
Lethargy	6
Malaise	5
Sweats	4
Nausea	3
Vomiting	2
Edema of extremities	2
Abdominal pain	2
Diplopia	2
Dizziness	1
Conjunctival hemorrhage	1
Total Cases	18

Sera were collected from 52 of the 67 patients. The diagnosis was confirmed by various serologic tests in 49 cases. Muscle biopsy was performed in 29 cases, of which 20 were positive. There were 19 cases that demonstrated both a positive serologic test and a positive muscle biopsy. There were nine cases with negative biopsies but positive serologic tests, and two cases with negative serologic tests but positive biopsies.

(Reported by Parasitic Diseases Section, Epidemiology Program, NCDC.)

A copy of the original report from which these data were derived is available on request from:
National Communicable Disease Center
Atlanta, Georgia 30333
Attn: Chief, Parasitic Diseases Section,
Epidemiology Program

THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 17,000, IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER — DAVID J. SENCER, M.D.
CHIEF, EPIDEMIOLOGY PROGRAM — A.O. LANGMUIR, M.D.
ACTING CHIEF, STATISTICS SECTION — IDA L. SHERMAN, M.S.
EDITOR — MICHAEL B. GREGG, M.D.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE NATIONAL COMMUNICABLE DISEASE CENTER WELCOMES ACCOUNTS OF INTERESTING OUTBREAKS OR CASE INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASES. SUCH COMMUNICATIONS SHOULD BE ADDRESSED TO:

NATIONAL COMMUNICABLE DISEASE CENTER
ATLANTA, GEORGIA 30333
ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON A NATIONAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY